Jim Clem and son, Mitch, with both versions of the A/B Okie Bird . . . sub-fin and aft-fin. You pays yer money and takes yer choice. B & W print from Ektacolor photo by Rose Lea Clem.

OKIE BIRD

By JIM CLEM . . . Here's your Class A or B competition free flight ship for the coming season. Both the design *and* the designer come well recommended. Aft and sub fin models are shown on the plans.

• The A-B size Okie Bird for engines .15 to .25, is basically an enlarged version of the ½/A Okie Bird which was designed in 1970. Without much fanfare, the latter has compiled an impressive contest record, including two first place Nats wins; one in ½/A Open, the other in A Open. Its contest record is especially good considering that only a limited number of ½/A kits have been made available since 1971.

Inspiration for the A-B size stems from the success of the ½/A, and the desire of several modelers to fly an intermediate size. Dick Smith, of the Central Ohio Free Flight Club, has been an advocate of this design and has assisted in its development by his flight test reports. Dick has been concentrating on the aft rudder version, which is included as an option on the plan.

Let's take a close look at the A-B machine and briefly discuss philosophy of design. It's small enough (wing area 486 sq. inches) to be very fast in the climb with a good .15, .19, .23, or .25, and it's large and light enough to stay upstairs a respectable length of time after the engine quits. It could be referred to as a "compromise" ship; not too small to glide well, not too large to climb fast.

If you examine the plans closely, you will notice the thrust line is above the rudder, even on the aft rudder version. This puts the rudder in the right side of the prop blast, which produces a natural right power turn. Some pylon ships of similar design have a tendency to dip to the right immediately after launch, before assuming their intended upward flight path. This undesirable trait is eliminated by the use of left engine thrust.

The Okie Bird has a left glide turn which comes about naturally. Most modelers like to use wash-in in the right wing panel of a ship that climbs to the right under power. This keeps the right wing up going into the turn. When the engine stops, the plane naturally wants to go into a left glide because of the wash-in in the right panel and the left rudder tab.

If you're looking for an easy contest machine to build, give the A-B Okie Bird a try. If aft rudder is your thing, this option is shown on the plan. It should be pointed out, however, that the sub rudder will handle the power just as well. As far as performance is concerned, there has been no discernible difference between the two machines. The weight of the A-B Okie Bird will vary from 19 to 21 ounces.

WING CONSTRUCTION

NOTE: Build in 1/4 inch wash-in to the right inboard panel, or, add the wash-in during the covering procedure. See covering details.

Begin construction by covering the plan with plastic film. Choose eight to ten pound (light-medium) 3/32 "C" grain for the main ribs. Use 1/16 "C" grain for the outer panel ribs. Cut out all of the main ribs, arrange them in stacks, and sand carefully to a uniform shape. Pin the 1/8 x 1/2 leading edge into place. Notch the 1/4 x 1 tapered trailing edge as shown on the plan. The notches in the outer panel trailing edges are only 1/16 wide. Pin the trailing edges in place. Glue the 3/16 x 1/4 leading edge strips to the 1/8 x 1/2 leading edge strips. The 3/16 x 1/4 L.E. should be offset 3/32 from the front of the 1/8 x 1/2 L.E., as shown on the plan.

Position the rear 1/8 x 3/8 spar on the plan and glue the 3/32 ribs into place. Be sure the rib notches at the dihedral joints are wide enough to receive the dihedral braces which will be installed later. Glue the main top spar and 1/8 sq. spars into place. Do not glue the 1/8 x 1/8 outer panel spars in place until the dihedral is installed. This also applies to the 1/8 x 3/8 top spar. Glue the 1/4 inch thick wing tips in place and trim to airfoil shape after the wing is dry.

The author prepares to launch. A Fox 25 leads the way.